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EXAMINER

KUMAR, SRILAKSHMI K

ART UNIT PAPER NUMBER

2629

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/776,677  
Filing Date: February 06, 2001  
Appellant(s): TAKEUCHI, KESATOSHI

**MAILED**

**JAN 17 2007**

**Technology Center 2600**

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Surinder Sachar  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed December 27, 2004 appealing from the Office action mailed February 24, 2004.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,160,576	Higuchi et al	12-2000
6,330,038	Johnson	12-2001

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higuchi et al. (US 6,160,576) in view of Johnson (US 6,330,038).

As to independent claims 1, 9 and 14, Higuchi et al disclose an image display apparatus, comprising: an image display device configured to display an image (Fig. 1, item 1); a setting section (Fig. 1, item 14) configured to allow a user to directly set image quality adjustment excluding contrast and brightness adjustments of the image; and an image processing section (Fig. 1, items 30, 40 & 50) configured to perform the image quality adjustment of the image according to the setting made by the user, and to perform contrast compensation to maintain a brightness at a center of a specific color region larger than a predetermined size within the image displayed by the image display device, regardless of the setting of the image quality adjustment (col. 5, lines 8-54, col. 5, line 63-col. 6, line 6). With respect to the limitation of where the specific color region larger than a predetermined size, Higuchi et al do disclose where the radius of the area is varied as the first image enhancer 34 is used to sharpen the blur caused by defocus or age related decline in focus (col. 11, line 49-col. 13, line 27). It would have been obvious to one of ordinary skill in the art that the specific color region larger than a predetermined size is

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shown by the system of Higuchi et al as stated above with the sharpening of the blur or defocus of the picture. This feature is advantageous as it enhances aged images to show a more refined and sharpened image. Higuchi et al do not disclose where the setting section (Fig. 1, item 14) is configured to allow a user to directly set image quality adjustment excluding contrast and brightness adjustments of the image.

Johnson discloses a video sharpness control device for a display. Johnson discloses in Fig. 7A and in col. 9, lines 29-43, where the sharpness may be set by the user separately from the brightness and contrast, so that the brightness can be maintained. It would have been obvious to one of ordinary skill in the art to combine the systems of Higuchi et al with that of Johnson as they both disclose displays with setting controls. The system of Johnson is advantageous as it enhances the video image by allowing the user to set controls separately.

As to dependent claims 6, 12 and 19, limitations of claim 1, 9 and 14, and further comprising, Higuchi et al disclose an image processing device, comprising: an image filter configured to perform filter processing of an image by using a selected one of a plurality of filters with different frequency characteristics (col. 6, lines 25-60); and a contrast compensation section configured to perform contrast compensation using a contrast compensation value, related to the selected filter, to maintain a brightness at a center of a specific color region larger than a predetermined size within an image that has undergone the filter processing, regardless of which filter is selected from the plurality of filters (col. 5, lines 8-54, col. 6, lines 25-60). Higuchi et al do not disclose where the specific color region larger than a predetermined size. Higuchi et al do disclose where the radius of the area is varied as the first image enhancer 34 is used to sharpen the blur caused by defocus or age related decline in focus (col. 11, line 49-col.

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13, line 27). It would have been obvious to one of ordinary skill in the art that the specific color region larger than a predetermined size is shown by the system of Higuchi et al as stated above with the sharpening of the blur or defocus of the picture. This feature is advantageous as it enhances aged images to show a more refined and sharpened image.

As to dependent claims 2 and 15, limitations of claims 1 and 14, and further comprising, wherein the image quality adjustment is a sharpness adjustment (col. 11, line 49-col. 13, line 27).

As to dependent claims 3, 7, 16 and 21, limitations of claims 1, 6, and 14, and further comprising, wherein the specific color is white. Higuchi et al disclose in col. 2, lines 17-28 where each of the color signal values R/G/B is compensated and also for a brightness signal of an image signal. It would have been obvious to one of ordinary skill in the art that the specific color would have been white as the image could have been one where there is no color and further a combination of R/G/B yields white and is advantageous as the brightness of the image would have been enhanced (col. 3, lines 66-col. 4, lines 6).

As to dependent claims 4, 10 and 17, limitations of claims 1, 9 and 14, and further comprising, wherein the image processing section includes:

an image filter configured to perform the image quality adjustment by selecting one of a plurality of filters with different frequency characteristics according to the setting of the image quality adjustment, and to perform filter processing on the image using the selected filter (col. 6, lines 25-60); and

a contrast compensation section configured to perform the contrast compensation upon the image that has undergone the filter processing, using a contrast compensation value related to the selected filter (Fig. 1, item 33, col. 6, lines 25-60).

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As to dependent claims 5, 8, 11, 13, 18 and 20, limitations of claims 4, 6, 9, 12, and 17, and further comprising, contrast adjustment section configured to perform contrast adjustment of the image independently of the contrast compensation section (Fig. 1 items 34 and 35, col. 11, line 49-col. 13, line 27).

#### **(10) Response to Argument**

With respect to the limitations of where the claimed image display device allows a user to directly set an image quality adjustment that is not a contrast or brightness adjustment of an image, the Applicant argues on page 5 of the appeal brief, where an age dial in the prior art Higuchi does not involve directly setting an image quality adjustment, and where the setting of an age dial can control certain color compensator parameters. Applicant argues where the age dial is at most an indirect control from the setting of the age dial. Examiner, respectfully, disagrees. Higuchi discloses in col. 5, lines 63-col. 6, line 1, "the color compensation parameter setting device 15 determines the amount of color compensation according to the values set by the age dial 14. The first enhancement parameter setting device 16 and the second enhancement parameter setting device 17 determine the amount of image enhancement according to the values set by the age dial 14." The setting of the age dial corresponds to directly setting image quality. The age dial is set according to the age of the observer. Thus, age is directly set, and the color compensator, first and second enhancement parameters are set accordingly as shown in Figs. 2-4. The above rejection discloses the deficiency of Higuchi et al to be setting image quality adjustment but excluding contrast and brightness, not directly setting image quality adjustment. The prior art Johnson is combined with Higuchi to disclose where the image quality adjustment, shown by Johnson to be sharpness, is set independently of the contrast and brightness.

Applicant argues where the prior art of Johnson does not teach or suggest performing a contrast compensation to maintain brightness. As shown by the rejection above, Higuchi discloses in col. 5, lines 63-col. 6, line 1, "the color compensation parameter setting device 15 determines the amount of color compensation according to the values set by the age dial 14. The first enhancement parameter setting device 16 and the second enhancement parameter setting device 17 determine the amount of image enhancement according to the values set by the age dial 14." The prior art of Johnson discloses where the image quality adjustment is that of sharpness and where sharpness in particular may be set separately from the brightness and contrast.

With respect to applicant's argument that there could be no incentive or motivation to combine the teachings in Higuchi and Johnson, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). The prior art Higuchi et al disclose an image processing device which compensates an original image deterioration and displays the compensated image. Higuchi et al disclose where an image quality adjustment in the form of an age dial is directly set and where in col. 5, lines 63-col. 6, line 1, "the color compensation parameter setting device 15 determines the amount of color compensation according to the values set by the age dial 14. The first enhancement parameter setting device 16 and the second enhancement parameter setting device 17 determine the amount of image enhancement according to the values set by the age dial 14."



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The prior art Johnson discloses a method and device for enhancing the sharpness of a video image by separately setting the sharpness resulting in the enhancement of the luminance signal, which can be a broad interpretation of image compensation. In view of the above remarks, the outstanding rejection of claims 1-21 is maintained.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

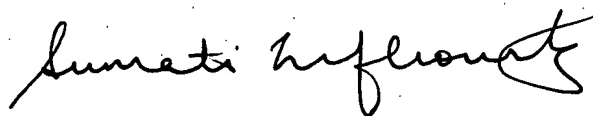
Respectfully submitted,



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December 26, 2006

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